



ATTACHMENT A

Remarks

Claim 1, 9 and 11 have been rejection under 35 USC 102(b) as being "anticipated by" the newly cited Kennedy patent. This rejection is respectfully traversed although claim 1 has been amended so as to even more clearly define over the Kennedy patent.

Considering the latter point in more detail, the conical-shaped valve diaphragm recited in claim 1 has now been recited as including a wall thickness which tapers towards the apex thereof. This feature is clearly illustrated in the drawings (apart from Figure 1 which shows a prior art valve) and the specification has been amended to describe in simple terms what is shown in the drawings and therefore specifically support the added claim language. This feature of the diaphragm, together with the resiliently flexible material from which the diaphragm is constructed, enable effective closure of the collapsible aperture.

Turning to the Kennedy patent, Kennedy discloses a check valve including an angular flange 7 to which a boubous-shaped central part 8 is connected. The central part 8 is thicker at the apex thereof than at its side walls so as to prevent "introversion of the valve by back pressure" (see page 1, lines 98-101, and page 2, lines 41-45 and lines 58-64). Upon opening of the check valve the valve hinges about the thinner inner wall portion of the boubous central part 8. The thicker walled apex portion of the central part 8, together with the transverse slit 10, operate in the manner of a conventional duck-bill valve of the type that is well known in the prior art.

In contrast, the present invention as claimed in claim 1 (and claim 4) relies on the conical-shaped diaphragm having a tapered wall in providing effective closure of the diaphragm. It is respectfully submitted that claim 1 as amended, clearly defines over the Kennedy patent. It is noted that claim 4 has been similarly amended, as indicated above.

Claims 1-4, 7-9 and 11 have been rejected under 35 USC 103(a) as being "unpatentable over" the previously cited Souza patent in view of the newly cited Kennedy patent. In addition, claims 2 and 3 claims 4 and 5, and claim 10 have been rejected based on this combination of references in view of a further secondary reference. These rejections are respectfully traversed.

As indicated above, a key feature of the diaphragm of the Kennedy patent is the provision of a thickened apex portion for preventing introversion. In the Souza patent, which basically discloses a conventional duck-bill type valve (in so far as the relevancy thereof to the present invention is concerned), the lip members 16, 16' terminate in flat end portions 25, 25' which form the slit-like, normally closed opening 26. These flat end portions 25, 25' are thinner than the corresponding lip members 16, 16' and thus, the teachings of the Souza patent with respect to end or apex portions, are completely opposed to those of the Kennedy patent.

Given the actual teachings of the references, it is respectfully submitted that it would not be obvious to combine the two references, and that, moreover, if the two references were combined, the resultant hybrid diaphragm would include tapering corresponding to that taught in the Kennedy patent. Thus, even assuming arguendo that it would be obvious to combine the teachings of the two references given the

disparate nature of these teachings, the resultant combination would necessarily be one that would not meet the terms of amended claims 1 and 4, i.e., one in which the walls of the diaphragm would not taper toward the apex of the diaphragm. Accordingly, it is respectfully submitted that claims 1-11 are allowable along with allowed claims 12 and 13.

Finally, it is noted that new claims 14 and 15 have been added which depend from claims 1 and 4 respectively, and further define over the Kennedy patent in reciting that the diaphragm bulges inwardly, i.e., has an inward curvature, rather than being purely conical.

Allowance of the application in its present form is respectfully submitted.

END REMARKS